



PATENT APPLICATION
Navy Case No. 82,591

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Keller et al.

Serial No.: 10/006,385

Filed: December 10, 2001

For: METAL NANOPARTICLE THERMOSET AND CARBON COMPOSITIONS FROM
MIXTURES OF METALLOCENE-AROMATIC-ACETYLENE COMPOUNDS

Examiner: Not Yet Assigned

Group Art Unit: 1754

February 28, 2002

Honorable Assistant Commissioner of Patents
Washington, D.C. 20231

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INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Pursuant to the provisions of 37 C.F.R. § 1.97 et seq., the applicants submit the most relevant documents of which applicants are currently aware. The documents are identified on the attached form PTO-1449 and/or in an accompanying Statement of Relevance.

To the extent available, copies of the patents and or other documents cited are enclosed. If available and to the extent needed, English translations of pertinent portions of any non-English language references are also enclosed.

By this submission, applicants do not assert that a search of the prior art was made or that the patents and documents cited constitute all relevant prior art. The references cited constitute only that information now known to the applicants which, in the reasonable opinion of the applicants, is relevant to the claimed invention. The Examiner is requested to consider these documents, and to indicate such in any forthcoming office action.

Kindly charge any additional fees due, or credit any overpayment of fees, to Deposit Account

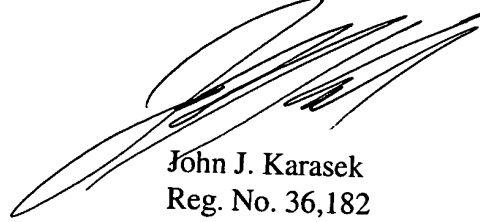
02/11/2002 NICHOLSON 00000121 500281 10006385

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No. 50-0281.

Respectfully submitted,

A handwritten signature in black ink, consisting of several overlapping, sweeping strokes that form a stylized representation of the name John J. Karasek.

John J. Karasek
Reg. No. 36,182

Prepared by:
Jane Barrow
Reg. No. 34,217
Phone No. 202-404-1551



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PTO/SB/17 (10-01)
Approved for use through 10/31/2002. OMB 0651-0032
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FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

(\$ 180

Complete if Known

Application Number	10/006,385
Filing Date	December 12, 2001
First Named Inventor	Keller
Examiner Name	not yet assigned
Group Art Unit	1754
Attorney Docket No.	79,838

METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to

Deposit Account Number 50-0281

Deposit Account Name Naval Research Laboratory

- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status, See 37 CFR 1.27

2. ☐ Payment Enclosed:

☐ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Small Entity
Fee Fee Fee Fee Fee Description
Code (\$) Code (\$)

101 740 201 370 Utility filing fee

106 330 206 165 Design filing fee

107 510 207 255 Plant filing fee

108 740 208 370 Reissue filing fee

114 160 214 80 Provisional filing fee

Fee Paid

SUBTOTAL (1) (\$ 0

2. EXTRA CLAIM FEES

Total Claims -20- = X Fee from below Fee Paid
Independent Claims -3- = X
Multiple Dependent =

Large Entity Small Entity
Fee Fee Fee Fee
Code (\$) Code (\$)

103 18 203 9 Claims in excess of 20

102 84 202 42 Independent claims in excess of 3

104 280 204 140 Multiple dependent claim, if not paid

109 84 209 42 ** Reissue independent claims over original patent

110 18 210 9 Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0

**or number previously paid, if greater, For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
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105 130 205 65 Surcharge - late filing fee or oath

127 50 227 25 Surcharge - late provisional filing fee or cover sheet

139 130 139 130 Non-English specification

147 2,520 147 2,520 For filing a request for ex parte reexamination

112 920* 112 920* Requesting publication of SIR prior to Examiner action

113 1,840* 113 1,840* Requesting publication of SIR after Examiner action

115 110 215 55 Extension for reply within first month

116 400 216 200 Extension for reply within second month

117 920 217 460 Extension for reply within third month

118 1,440 218 720 Extension for reply within fourth month

128 1,960 228 980 Extension for reply within fifth month

119 320 219 160 Notice of Appeal

120 320 220 160 Filing a brief in support of an appeal

121 280 221 140 Request for oral hearing

138 1,510 138 1,510 Petition to institute a public use proceeding

140 110 240 55 Petition to revive - unavoidable

141 1,280 241 640 Petition to revive - unintentional

142 1,280 242 640 Utility issue fee (or reissue)

143 460 243 230 Design issue fee

144 620 244 310 Plant issue fee

122 130 122 130 Petitions to the Commissioner

123 50 123 50 Processing fee under 37 CFR 1.17(c)

126 180 126 180 Submission of Information Disclosure Stmt

581 40 581 40 Recording each patent assignment per property (times number of properties)

146 740 246 370 Filing a submission after final rejection (37 CFR § 1.129(a))

149 740 249 370 For each additional invention to be examined (37 CFR § 1.129(b))

179 740 279 370 Request for Continued Examination (RCE)

169 900 169 900 Request for expedited examination of a design application

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 180

SUBMITTED BY

Name (Print/Type)	John J. Karasek	Registration No. (Attorney/Agent)	36,182	Complete (if applicable)	
Signature		Telephone	202-404-1552	Date	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 3

Complete if Known

Application Number	10/006,385
Filing Date	December 10, 2001
First Named Inventor	Keller
Group Art Unit	1754
Examiner Name	not yet assigned
Attorney Docket Number	82,591

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Jacoby, Data Storage: New Materials Push the Limits, June 12, 2000, C&EN, pp 37-45	
		Koltypin et al, Encapsulation of Nickel Nanoparticles in Carbon Obtained by the Sonochemical Decomposition of Ni(C8H12)2, Chem. Mater., 1999, Vol 11, pp. 1331-135	
		Morales et al, Surface and Internal Spin Canting in γ -Fe2O3 Nanoparticles, Chem Mater., 1999, Vol 11, pp. 3058-3064	
		Jia et al, Some Acetylene and Hydride Chemistry of Group 8 Metal Complexes with Cyclopentadienyls and their Analogous Ligands, J. Organometallic Chemistry, 565, (1998), PP. 37-48	
		Kruis et al, Synthesis of Nanoparticles in the Gas Phase for Electronic, Optical and Magnetic Applications - A Review, J. Aerosol Sci. Vol 29, No. 5/6, pp. 511-535, 1998	
		Carpenter et al, Organometallic Compounds as Single-source Precursors to Nanocomposite Materials: An Overview, J. Organometallic Chemistry 557 (1998) pp. 121-130	
		Manziek et al, Functionalized Emulsion and Suspension Polymer Particles: Nanoreactors for the Synthesis of Inorganic Materials, Chem. Mater., 1998, Vol 10, pp 3101-3108	
		Fink et al, Ethynylferrocene Compounds of 1,3,5-Tribromobenzene, Organometallics, 1997, Vol 16, pp. 2646-2650	
		Moumen et al, New Synthesis of Cobalt Ferrite Particles in the Range 2-5nm: Comparison of the Magnetic Properties of the Nanosized Particles in Dispersed Fluid or in Powder Form, Chem. Mater., 1996, Vol 8, pp. 1128-1134	
		Hsung et al, Synthesis and Characterization of Unsymmetric Ferrocene-Terminated Phenylethynyl Oligomers Cp2Fe-[C=C-C6H4] _n -X(X=SH, SMe, SOMe, and SO2Me) Organometallics, 1995, Vol 14, pop. 4808-4815	
		Moller et al, Inorganic Nanoclusters in Organic Glasses-Novel Materials for Electro-optical Applications, Synthetic Metals, 41-43 (1991) pp 1159-1162	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

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Sheet	3	of	3
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Filing Date	December 10, 2001
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First Named Inventor	Keller
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Group Art Unit	1754
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Examiner Name _____

Attorney Docket Number	82.591
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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner
Initials

Cite
No.¹

Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.

12

Hess et al, Polymers for Stabilization of Colloidal Cobalt Particles, J. Applied Polymer Science, Vol 10, (1966), pp. 1915-1927

Thomas, Preparation and Magnetic Properties of Colloidal Cobalt Particles, J. Appl. Phys., (1966)

Keller et al, Polymeric and Carbon Compositions with Metal Nanoparticles, Application Number 10/006,226, filed December 12, 2001

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